

REMARKS

This Amendment, filed in reply to the Office Action dated March 17, 2006, is believed to be fully responsive to each point of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

Claims 2-16 remain pending the application. Claims 2-3, 7 and 16 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Michel (U.S.P. 6,215,562) in view of Bernardi (U.S.P. 6,021,278). Claims 4-5 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Michel in view of Bernardi and Wong (U.S.P. 6,557,102). Claim 6 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Michel in view of Bernardi and Hisatake (U.S.P. 5,669,040). Claims 8 and 13 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Michel in view of Bernardi and Enomoto (U.S.P. 6,034,759). Claim 9 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Michel in view of Bernardi and well-known prior art. Claim 10 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Michel in view of Bernardi and Higurashi (U.S.P. 6,011,896). Claim 11 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Michel in view of Bernardi, Wong and Kashiyama (U.S.P. 6,295,415). Claim 12 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Michel in view of Bernardi, Wong, Kashiyama and obvious engineering design choice. Claim 14 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Michel in view of Bernardi, Hisatake and Enomoto. Claim 15 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Michel in view of Bernardi, well-

known prior art and Enomoto. Applicant respectfully submits the following arguments in traversal of the prior art rejections.

Applicant's invention relates to a method for image correction. In conventional techniques, when an operator determines that a simulated image is not correct, significant expertise is required to make the correction, such as for color (C, M, Y), gradient, contrast or sharpness. Applicant's invention obviates this deficiency.

As an exemplary adjustment, Table 1 (page 28) illustrates density adjustment categorized by verbal expression as "a little" thin, "considerably" thin and "very" thin. Values of increases (+) are set at 1, 4, and 6 respectively as default correction values for each verbal expression, respectively. Additional levels are also indicated. Thus, if an operator indicates a density as "a little" "considerably" or "very" thin, respective upward adjustments of 1, 4 and 6 are applied. This may be performed iteratively, with each change of the resulting image displayed until a desired simulated image is obtained. Because the system uses abstract verbal expressions, only moderate expertise for correction is required. The levels also include associated totalization values, or use affiliated with each level of correction. The default value can be adjusted with reference to the totalization associated with each level of correction.

Turning to the newly cited art, Michel relates to a calibration method for a printer. With reference to Fig. 1, left most circle that can be distinguished from their backgrounds with a 0% density are selected to set the "low" point, and the circle with the highest density that can be distinguished from its background sets the "high" endpoint (ink percent). A black circle

matching the background with 30% density is selected at the 30% density. Col. 5, line 38 to Col. 6, line 38. Based on the selected value, the color balance of 30% black is established to print the background gray 100 of Fig. 2. The C, M, Y of the printer produces the color bar 125 and multiple color test chart patches, with columns representing coefficient **hue** and rows representing different saturation. Col. 6, lines 49-52. A user selects which patch closest matches the 30% (gray) density by row and column. Once an acceptable match is determined, the relation of C, M, Y inks in relation to black are determined as a set of transfer curves. Col. 7, lines 1-14.

Bernardi relates to a camera having speech recognition capabilities, such as for zoom in, zoom out.

The Examiner contends that the combination of Michel and Bernardi teaches each feature of independent claim 2. Applicant submits that the rejection is not supported for at least the following four reasons.

First, clam 2 describes a verbal expression representing a condition of an image is previously set, a level indicative expression as to a degree of improperness of the image, and a correction condition corresponding to the verbal expression and level indicative expression. The Examiner relies on the general calibration of the high-low start points (represented in Fig. 1) and the 30% gray calibration (Fig. 2) as teaching these aspects of the claim. However, the calibration features of Michel, at least, teach the condition of a printer, in its production of visibly discernible high and low levels and 30 % grey. These do not relate to condition of an image.

Second, and relatedly, to the extent the test bars (Fig. 1) and color patches (Fig. 2) can be considered “images”, the adjustment of color patches (Fig. 2) is not a degree of improperness of an image condition, where the Examiner refers to Fig. 1. In other words, the 30% adjustment of Fig. 2 (col. 6, line 62 to col. 7, line 3) is not a degree of improperness to be executed to the image of Fig. 1 (Col. 5, lines 44-60), which sets a different calibration parameter altogether.

More particularly, in the present invention, the input of a condition of an image or direction of correction of the image (verbal expression input), the input of the level of the condition of the image or the level of the degree of correction of the image (level indicative expression input) and an image correction condition corresponding to the two inputs are previously set. Specifically, the input of the level of the condition of the image or the level of degree of correction of the image described above is an input specifically defining the condition of the image or the degree of correction of the image, and the two inputs are correlated. (See also, claim 3). In contrast, concerning the input to set the endpoint and the 30% density in black using the first target layout shown in Fig. 1 and the input to set the gray balance using the second target layout shown in Fig. 2 recited in Michel, these inputs are performed by the user viewing completely different layout images, and the corrections themselves are different (one input is to set the dynamic range and the 30% density in black and the other input is to correct gray balance). Further as disclosed at col. 7, line 9-14, the set of four transfer curves are calculated according to the inputs, and the set of transfer curves in accordance with the image correction condition is not previously set, which is different from the present invention. Accordingly, there is a significant difference between the present invention and Michel as shown above. The

combination of Michel in view of Bernardi constitutes the basis for rejection of the present claims.

Third, claim 2 describes plural image correction conditions are set with respect to a verbal expression. While the Examiner acknowledges that Michel does not teach the verbal expression, the Examiner contends that Michel teaches different intensities with respect to user input. The Examiner relies of Fig. 1 as teaching this feature. However, in Fig. 1, the circles only represent high-low start points. No correction is provided, and only one circle is selected per user input per row. Therefore, the Examiner's restructuring of the claim, which in and of itself would warrant withdrawal of the rejection, is also not supportable. The Examiner's reliance on the single patch selection with reference to Fig. 2(Col. 7, lines 1-3) is also deficient for analogous reasons.

Fourth, the Examiner's reliance on Bernardi to teach the verbal expressions does not correct any of the deficiencies noted above, even assuming that such combination is correct. Therefore, claim 2 is patentable for at least these reasons.

Because independent claims 3, 6 and 9 include an analogous recitation to claim 2, these claims are also patentable for the reasons set forth above in the first, second and fourth arguments. Claim 6 is also patentable for the third reason set forth for claim 2.

With further regard to claim 3, this claim describes that the relation between the verbal expression and level indicative expression of initial input and final correction is totaled, and an update to the correction condition is made based on the totalization. The Examiner contends that

Michel teaches this feature at col. 7, lines 3-14. Michel teaches that the color patch selection and comparison are performed iteratively. However, there is no “total” associated with the selection. The totalization of claim 3 results from the level input by the user expression is based on a subjective view of a user, and it becomes necessary to create a relationship between the level input based on the subjective view and the image correction condition by totalization. Michel does not require such a totalization or the derivation of such a relationship based on user input. Therefore, claim 3 is patentable for this additional reason.

The remaining claims 4-5, 7-8 and 10-16 are patentable based on their dependency as none of the additional secondary references make up for the deficiency of the primary combination. With further regard to claims 4-5 and 10, these claims describe a variation of totalization. The Examiner relies on Wong to teach these various aspects. However, Wong relates to a security and authentication system for transfer of medical images. In this sense, Wong does not bear any relation to the field of image correction, as the present invention. Though the Examiner contends Wong and the present invention have common purposes of authentication, this is merely conclusory. The correction of the present invention is performed locally such that the transfer and time stamp of Wong bears no relation to the invention. Moreover, no authentication is required for the primary reference Michel, which is merely a calibration procedure. Even assuming the Wong may be combined with Michel and Bernardi, Wong does not teach totalization as claimed. The cited portions of Wong relate to hash and time stamp analysis for authentication, where the hash is based on header and modified image data. Wong further fails to teach the sorting criteria of claim 5, since Wong relates to medical image

transfer rather than printing. The basic identification information (hospital, patient name, exam date) do not correspond to the claimed sorting criteria associated with prints. There is no image scene sorting of overexposure scenes, underexposure scenes, ordinary scenes, portraits, scenery, night view. See claim 11.

With further regard to claim 6, the Examiner combines Michel, Bernardi and Hisatake. Hisatake relates to print job management. The Examiner concludes that Hisatake is combinable with Michel and Bernardi because they all relate to prioritization of computer operations. However, only Hisatake has this object. Camera operations (Bernardi) and printer calibration (Michel) do not implicate the coordination requirements of Hisatake. The Examiner cites Fig. 1 and col. 5, lines 53-60 and col. 7, lines 1-3 to teach a plurality of image correction conditions having different image correcting algorithms. However, these citations concern selection of "low" and "high" end points that can be distinguished from the background in a first target layout shown in Fig. 1 and the selection of an optimum patch matching gray in the second target layout of Fig. 2. As discussed above in reference to claim 2, this does not correspond to plural image correction conditions having different image correcting algorithms being set with respect to the user input. Therefore, claim 6 is patentable.

With further regard to claim 10, this claim describes totalization on a frame basis. The Examiner further cites Higarashi as teaching this feature. However, Higarashi only teaches tracking an error per frame, not totalization for a predetermined number of frames. Therefore, claim 10 is patentable.

AMENDMENT UNDER 37 C.F.R. § 1.111
Appln. No.: 09/852,301

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Applicant adds claims 17-20 to describe features of the invention more particularly.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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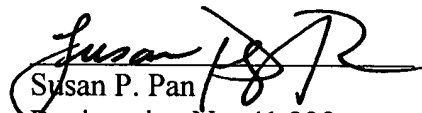
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